IN THE CLAIMS:

Please amend the claims as indicated below.

1. (Currently Amended) A detection method using a receiver of a digital communication system for the detection of a symbol from a received signal, which signal is transmitted by a transmitter of the digital communication system, wherein the symbol is a selected symbol out of a predetermined set of symbols and wherein each symbol of the predetermined set comprises a sequence of chips wherein each of the chips is PSK-modulated according to a selected modulation code, wherein the method comprises:

generating a set of reference symbols ~~is generating~~ on the basis of the predetermined set of symbols and a channel impulse response between the transmitter and the receiver~~,~~; and

comparing ~~wherein~~ each of the successive parts of the received signal, each part having the length of a symbol, ~~is compared~~ with each of the reference symbols, yielding a detected symbol for each part of the received signal.

2. (Original) The method according to claim 1, further comprising the step of generating a correction signal on the basis of the detected symbol convolved with the channel impulse response, wherein the correction signal is subtracted from the part of the received signal which succeeds the part of the received signal corresponding to the detected symbol for suppressing the ISI-effect.

3. (Original) The method according to claim 1, wherein the comparison between each of the parts of the received signal with each of the reference symbols is performed by a correlator yielding a correlation value, wherein the correlation value is corrected with half the energy of the reference symbol.

4. (Currently Amended) A detection method using a receiver of a digital communication system for the detection of a symbol from a received signal, which signal is transmitted by a transmitter of the digital communication system, wherein the symbol is a selected symbol out of a predetermined set of symbols and wherein each symbol of

the predetermined set comprises a sequence of chips wherein each of the chips is PSK-modulated according to a selected modulation code, wherein the method comprises:

filtering the received signal ~~filtering by~~ with a filter which yields a filter signal, wherein the filter is a matched filter to the channel impulse response between the transmitter and the receiver~~,~~; and

comparing ~~wherein~~ each of the successive parts of the filter signal, each part having the length of a symbol, ~~is compared~~ with each of the symbols from the predetermined set of symbols yielding a detected symbol for each part of the filter signal.

5. (Original) The method according to claim 4, further comprising the step of generating

a correction signal on the basis of the detected symbol, wherein the correction signal is subtracted from the part of filter signal which succeeds the part of the filter signal corresponding to the detected symbol for suppressing the ISI-effect.

6. (Currently Amended) The method according to ~~one of the~~ claim 4, wherein the comparison, between each of the parts of the filter signal with each of the reference symbols, is performed by a correlator yielding a correlation value, wherein the correlation value is corrected with half the energy of the reference symbol.